



**STATE OF TENNESSEE
DEPARTMENT OF HEALTH
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL
Lab Services - Jackson Regional Lab
Jackson, TN 38301
731-426-0686

TDH: Lab Services KRL
Lab Services - Knoxville Regional Lab
Knoxville, TN 37920
865-549-5201

TDH: Lab Services NCL
Lab Services - Nashville Central Lab
Nashville, TN 37243
615-262-6300

Sent To: Greg Denton
TDEC-WPC
6th Floor, L & C Tower Annex
401 Church Street
Nashville, TN 37243-1534


Michael Atchley
TDEC-WPC
Knoxville FO
3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: K00002210
Knoxville Regional Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code: 327.34-20

This is to certify that the following results were determined using
good laboratory practices and in accordance with federal or state
approved methodologies.


Analytical Supervisor

Lab-Sample Number: K00002210001
Project Name:
Sample Description: Emory River mile 12.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 03/10/2009 10:25
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 7.76 pH Units
Chlorine, residual:
Conductivity: 49 uMHO
Temperature: 12.01
Dissolved Oxygen: 11.67 mg/L
Other:
Flow: CFS

| TEST: Alkalinity, Total | | METHOD: EPA 310.2 | | | | |
|-------------------------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 12 | mg/L | 3.8 | 10 | M Chen | 3/13/2009 |

| TEST: Hardness, Calcium | | METHOD: SM 3500-Ca D | | | | |
|-------------------------|--------|----------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 13 | mg/L | 0.7 | 1 | M Chen | 3/13/2009 |

| TEST: Residue, Settleable | | METHOD: SM 2540F | | | | |
|---------------------------|--------|------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Settleable Residue | U | ml/L | 0.10 | 0.10 | P Leathers | 3/12/2009 |

| TEST: Residue, Suspended | | METHOD: SM 2540D | | | | |
|--------------------------|--------|------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Suspended Solids | U | mg/L | 10 | 10 | A Peoples | 3/13/2009 |

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002210002
Project Name:
Sample Description: Emory River mile 2.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 03/11/2009 10:15
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 7.22 pH Units
Chlorine, residual:
Conductivity: 48 uMHO
Temperature: 9.95
Dissolved Oxygen: 12.46 mg/L
Other:
Flow: CFS

| TEST: Alkalinity, Total | | METHOD: EPA 310.2 | | | | |
|-------------------------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 14 | mg/L | 3.8 | 10 | M Chen | 3/13/2009 |

| TEST: Hardness, Calcium | | METHOD: SM 3500-Ca D | | | | |
|-------------------------|--------|----------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 18 | mg/L | 0.7 | 1 | M Chen | 3/13/2009 |

| TEST: Residue, Settleable | | METHOD: SM 2540F | | | | |
|---------------------------|--------|------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Settleable Residue | U | ml/L | 0.10 | 0.10 | P Leathers | 3/12/2009 |

| TEST: Residue, Suspended | | METHOD: SM 2540D | | | | |
|--------------------------|--------|------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Suspended Solids | U | mg/L | 10 | 10 | A Peebles | 3/13/2009 |

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002210003
Project Name:
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA Ash Spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 03/11/2009 10:26
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 8.07 pH Units
Chlorine, residual:
Conductivity: 223 uMHO
Temperature: 11.01
Dissolved Oxygen: 12.48 mg/L
Other:
Flow: CFS

| TEST: Alkalinity, Total | | METHOD: EPA 310.2 | | | | |
|-------------------------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 110 | mg/L | 3.8 | 10 | M Chen | 3/13/2009 |

| TEST: Hardness, Calcium | | METHOD: SM 3500-Ca D | | | | |
|-------------------------|--------|----------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 92 | mg/L | 0.7 | 1 | M Chen | 3/13/2009 |

| TEST: Residue, Settleable | | METHOD: SM 2540F | | | | |
|---------------------------|--------|------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Settleable Residue | U | ml/L | 0.10 | 0.10 | P Leathers | 3/12/2009 |

| TEST: Residue, Suspended | | METHOD: SM 2540D | | | | |
|--------------------------|--------|------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Suspended Solids | U | mg/L | 10 | 10 | A Peebles | 3/13/2009 |

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002210004
Project Name:
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 03/11/2009 10:40
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 8.12 pH Units
Chlorine, residual:
Conductivity: 220 uMHO
Temperature: 10.98
Dissolved Oxygen: 12.61 mg/L
Other:
Flow: CFS

| TEST: Alkalinity, Total | | METHOD: EPA 310.2 | | | | |
|-------------------------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 120 | mg/L | 3.8 | 10 | M Chen | 3/13/2009 |

| TEST: Hardness, Calcium | | METHOD: SM 3500-Ca D | | | | |
|-------------------------|--------|----------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 97 | mg/L | 0.7 | 1 | M Chen | 3/13/2009 |

| TEST: Residue, Settleable | | METHOD: SM 2540F | | | | |
|---------------------------|--------|------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Settleable Residue | U | ml/L | 0.10 | 0.10 | P Leathers | 3/12/2009 |

| TEST: Residue, Suspended | | METHOD: SM 2540D | | | | |
|--------------------------|--------|------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Suspended Solids | U | mg/L | 10 | 10 | A Peebles | 3/13/2009 |

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002210005
Project Name:
Sample Description: Emory River mile 0.1- Field Duplicate
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO-FD
Date/Time Collected: 03/11/2009 10:40
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 8.12 pH Units
Chlorine, residual:
Conductivity: 221 uMHO
Temperature: 10.90
Dissolved Oxygen: 12.63 mg/L
Other:
Flow: CFS

| TEST: Alkalinity, Total | | METHOD: EPA 310.2 | | | | |
|-------------------------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 120 | mg/L | 3.8 | 10 | M Chen | 3/13/2009 |

| TEST: Hardness, Calcium | | METHOD: SM 3500-Ca D | | | | |
|-------------------------|--------|----------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 90 | mg/L | 0.7 | 1 | M Chen | 3/13/2009 |

| TEST: Residue, Settleable | | METHOD: SM 2540F | | | | |
|---------------------------|--------|------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Settleable Residue | U | ml/L | 0.10 | 0.10 | P Leathers | 3/12/2009 |

| TEST: Residue, Suspended | | METHOD: SM 2540D | | | | |
|--------------------------|--------|------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Suspended Solids | U | mg/L | 10 | 10 | A Peebles | 3/13/2009 |

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002210006
Project Name:
Sample Description: Emory River mile 0.1- Field Blank
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO-FB
Date/Time Collected: 03/11/2009 10:40
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

| TEST: Alkalinity, Total | | METHOD: EPA 310.2 | | | | |
|-------------------------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | U | mg/L | 3.8 | 10 | M Chen | 3/13/2009 |

| TEST: Hardness, Calcium | | METHOD: SM 3500-Ca D | | | | |
|-------------------------|--------|----------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | U | mg/L | 0.7 | 1 | M Chen | 3/13/2009 |

| TEST: Residue, Settleable | | METHOD: SM 2540F | | | | |
|---------------------------|--------|------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Settleable Residue | U | ml/L | 0.10 | 0.10 | P Leathers | 3/12/2009 |

| TEST: Residue, Suspended | | METHOD: SM 2540D | | | | |
|--------------------------|--------|------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Suspended Solids | U | mg/L | 10 | 10 | A Peebles | 3/13/2009 |

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002210007
Project Name:
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA Ash Spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 03/11/2009 10:54
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 8.02 pH Units
Chlorine, residual:
Conductivity: 183 uMHO
Temperature: 11.32
Dissolved Oxygen: 12.51 mg/L
Other:
Flow: CFS

| TEST: Alkalinity, Total | | METHOD: EPA 310.2 | | | | |
|-------------------------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 110 | mg/L | 3.8 | 10 | M Chen | 3/13/2009 |

| TEST: Hardness, Calcium | | METHOD: SM 3500-Ca D | | | | |
|-------------------------|--------|----------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 79 | mg/L | 0.7 | 1 | M Chen | 3/13/2009 |

| TEST: Residue, Settleable | | METHOD: SM 2540F | | | | |
|---------------------------|--------|------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Settleable Residue | U | ml/L | 0.10 | 0.10 | P Leathers | 3/12/2009 |

| TEST: Residue, Suspended | | METHOD: SM 2540D | | | | |
|--------------------------|--------|------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Suspended Solids | U | mg/L | 10 | 10 | A Peebles | 3/13/2009 |

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002210008

Project Name:

Sample Description: Clinch River mile 4.5 near Sugar Grove Valley R

Sampler Project Name: TVA Ash Spill

Project Site No.: 6

Station No.: CLINC004.5RO

Date/Time Collected: 03/11/2009 11:05

Sampler's Name: Justin Fisher

County: ROANE - 73

Sample Matrix: Water

EFO: Knoxville

Sampling Agency: TDEC-WPC

Billing Code: 327.34-20

Send Report To: TDEC-WPC

Agency Invoiced: TDEC-WPC

Priority Date:

Date/Time Received: 03/11/2009 15:25

Received By: E McCrary

Field Determinations

pH: 8.11 pH Units

Chlorine, residual:

Conductivity: 228 uMHO

Temperature: 10.09

Dissolved Oxygen: 12.76 mg/L

Other:

Flow: CFS

| TEST: Alkalinity, Total | | METHOD: EPA 310.2 | | | | |
|-------------------------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 120 | mg/L | 3.8 | 10 | M Chen | 3/13/2009 |

| TEST: Hardness, Calcium | | METHOD: SM 3500-Ca D | | | | |
|-------------------------|--------|----------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 87 | mg/L | 0.7 | 1 | M Chen | 3/13/2009 |

| TEST: Residue, Settleable | | METHOD: SM 2540F | | | | |
|---------------------------|--------|------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Settleable Residue | U | ml/L | 0.10 | 0.10 | P Leathers | 3/12/2009 |

| TEST: Residue, Suspended | | METHOD: SM 2540D | | | | |
|--------------------------|--------|------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Suspended Solids | U | mg/L | 10 | 10 | A Peebles | 3/13/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected



**STATE OF TENNESSEE
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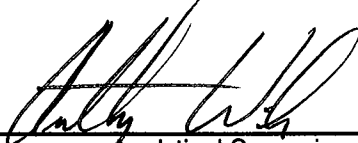
Michael Atchley
TDEC-WPC
Knoxville FO
3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: K00002210
Knoxville Regional Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code: 327.34-20

This is to certify that the following results were determined using
good laboratory practices and in accordance with federal or state
approved methodologies.



Analytical Supervisor

Lab-Sample Number: K00002210001
Project Name:
Sample Description: Emory River mile 12.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 03/10/2009 10:25
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 7.76 pH Units
Chlorine, residual:
Conductivity: 49 uMHO
Temperature: 12.01
Dissolved Oxygen: 11.67 mg/L
Other:
Flow: CFS

| TEST: Digestion Metals | | METHOD: EPA 200.2 | | | | |
|------------------------|------------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 03/12/2009 | | | | A Wilson | 3/12/2009 |

| TEST: ICP | | METHOD: EPA 200.7 | | | | |
|-----------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Iron | 100 | µg/L | 2.9 | 10 | M Pattanayek | 3/13/2009 |

| TEST: ICP-MS | | METHOD: EPA 200.8 | | | | |
|--------------|--------|-------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Aluminum | 75 | µg/L | 6.4 | 10 | M Pattanayek | 3/12/2009 |
| Antimony | U | µg/L | 0.33 | 1 | M Pattanayek | 3/12/2009 |
| Arsenic | U | µg/L | 0.93 | 5 | M Pattanayek | 3/12/2009 |
| Barium | 22 | µg/L | 2.5 | 5 | M Pattanayek | 3/12/2009 |
| Beryllium | U | µg/L | 0.11 | 1 | M Pattanayek | 3/12/2009 |
| Cadmium | U | µg/L | 0.41 | 1 | M Pattanayek | 3/12/2009 |
| Chromium | U | µg/L | 2.0 | 5 | M Pattanayek | 3/12/2009 |
| Cobalt | 0.18J | µg/L | 0.04 | 1 | M Pattanayek | 3/12/2009 |
| Copper | 2.2 | µg/L | 0.38 | 1 | M Pattanayek | 3/12/2009 |
| Lead | 0.16J | µg/L | 0.10 | 1 | M Pattanayek | 3/12/2009 |
| Manganese | 23 | µg/L | 0.42 | 1 | M Pattanayek | 3/12/2009 |
| Nickel | 0.86J | µg/L | 0.25 | 1 | M Pattanayek | 3/12/2009 |
| Selenium | U | µg/L | 1.3 | 5 | M Pattanayek | 3/12/2009 |
| Silver | U | µg/L | 0.03 | 0.25 | M Pattanayek | 3/12/2009 |
| Thallium | 0.13J | µg/L | 0.03 | 1 | M Pattanayek | 3/12/2009 |
| Vanadium | U | µg/L | 3.4 | 5 | M Pattanayek | 3/12/2009 |
| Zinc | 4.7J | µg/L | 1.9 | 5 | M Pattanayek | 3/12/2009 |

Lab-Sample Number: K00002210001
Project Name:
Sample Description: Emory River mile 12.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 03/10/2009 10:25
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 7.76 pH Units
Chlorine, residual:
Conductivity: 49 uMHO
Temperature: 12.01
Dissolved Oxygen: 11.67 mg/L
Other:
Flow: CFS

| TEST: Mercury | | METHOD: EPA 245.1 | | | | | |
|---------------|--------|-------------------|------|-----|--------------|-----------|--|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE | |
| Mercury | U | µg/L | 0.13 | 0.2 | A Wilson | 3/12/2009 | |

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: K00002210002
Project Name:
Sample Description: Emory River mile 2.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 03/11/2009 10:15
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 7.22 pH Units
Chlorine, residual:
Conductivity: 48 uMHO
Temperature: 9.95
Dissolved Oxygen: 12.46 mg/L
Other:
Flow: CFS

| TEST: Digestion Metals | | | METHOD: EPA 200.2 | | | |
|------------------------|------------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 03/12/2009 | | | | A Wilson | 3/12/2009 |

| TEST: ICP | | | METHOD: EPA 200.7 | | | |
|-----------|--------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Iron | 150 | µg/L | 2.9 | 10 | M Pattanayek | 3/13/2009 |

| TEST: ICP-MS | | | METHOD: EPA 200.8 | | | |
|--------------|--------|-------|-------------------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Aluminum | 120 | µg/L | 6.4 | 10 | M Pattanayek | 3/12/2009 |
| Antimony | 0.48J | µg/L | 0.33 | 1 | M Pattanayek | 3/12/2009 |
| Arsenic | U | µg/L | 0.93 | 5 | M Pattanayek | 3/12/2009 |
| Barium | 23 | µg/L | 2.5 | 5 | M Pattanayek | 3/12/2009 |
| Beryllium | U | µg/L | 0.11 | 1 | M Pattanayek | 3/12/2009 |
| Cadmium | U | µg/L | 0.41 | 1 | M Pattanayek | 3/12/2009 |
| Chromium | U | µg/L | 2.0 | 5 | M Pattanayek | 3/12/2009 |
| Cobalt | 0.26J | µg/L | 0.04 | 1 | M Pattanayek | 3/12/2009 |
| Copper | 0.50J | µg/L | 0.38 | 1 | M Pattanayek | 3/12/2009 |
| Lead | 0.15J | µg/L | 0.10 | 1 | M Pattanayek | 3/12/2009 |
| Manganese | 37 | µg/L | 0.42 | 1 | M Pattanayek | 3/12/2009 |
| Nickel | 0.96J | µg/L | 0.25 | 1 | M Pattanayek | 3/12/2009 |
| Selenium | U | µg/L | 1.3 | 5 | M Pattanayek | 3/12/2009 |
| Silver | U | µg/L | 0.03 | 0.25 | M Pattanayek | 3/12/2009 |
| Thallium | 0.54J | µg/L | 0.03 | 1 | M Pattanayek | 3/12/2009 |
| Vanadium | U | µg/L | 3.4 | 5 | M Pattanayek | 3/12/2009 |
| Zinc | 4.5J | µg/L | 1.9 | 5 | M Pattanayek | 3/12/2009 |

Lab-Sample Number: K00002210002
Project Name:
Sample Description: Emory River mile 2.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 03/11/2009 10:15
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 7.22 pH Units
Chlorine, residual:
Conductivity: 48 uMHO
Temperature: 9.95
Dissolved Oxygen: 12.46 mg/L
Other:
Flow: CFS

| TEST: Mercury | | METHOD: EPA 245.1 | | | | |
|---------------|--------|-------------------|------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Mercury | U | µg/L | 0.13 | 0.2 | A Wilson | 3/12/2009 |

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002210003
Project Name:
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA Ash Spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 03/11/2009 10:26
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 8.07 pH Units
Chlorine, residual:
Conductivity: 223 uMHO
Temperature: 11.01
Dissolved Oxygen: 12.48 mg/L
Other:
Flow: CFS

| TEST: Digestion Metals | | METHOD: EPA 200.2 | | | | |
|------------------------|------------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 03/12/2009 | | | | A Wilson | 3/12/2009 |

| TEST: ICP | | METHOD: EPA 200.7 | | | | |
|-----------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Iron | 100 | µg/L | 2.9 | 10 | M Pattanayek | 3/13/2009 |

| TEST: ICP-MS | | METHOD: EPA 200.8 | | | | |
|--------------|--------|-------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Aluminum | 110 | µg/L | 6.4 | 10 | M Pattanayek | 3/12/2009 |
| Antimony | U | µg/L | 0.33 | 1 | M Pattanayek | 3/12/2009 |
| Arsenic | U | µg/L | 0.93 | 5 | M Pattanayek | 3/12/2009 |
| Barium | 36 | µg/L | 2.5 | 5 | M Pattanayek | 3/12/2009 |
| Beryllium | U | µg/L | 0.11 | 1 | M Pattanayek | 3/12/2009 |
| Cadmium | U | µg/L | 0.41 | 1 | M Pattanayek | 3/12/2009 |
| Chromium | U | µg/L | 2.0 | 5 | M Pattanayek | 3/12/2009 |
| Cobalt | 0.16J | µg/L | 0.04 | 1 | M Pattanayek | 3/12/2009 |
| Copper | 4.0 | µg/L | 0.38 | 1 | M Pattanayek | 3/12/2009 |
| Lead | 0.29J | µg/L | 0.10 | 1 | M Pattanayek | 3/12/2009 |
| Manganese | 28 | µg/L | 0.42 | 1 | M Pattanayek | 3/12/2009 |
| Nickel | 1.3 | µg/L | 0.25 | 1 | M Pattanayek | 3/12/2009 |
| Selenium | U | µg/L | 1.3 | 5 | M Pattanayek | 3/12/2009 |
| Silver | U | µg/L | 0.03 | 0.25 | M Pattanayek | 3/12/2009 |
| Thallium | 0.18J | µg/L | 0.03 | 1 | M Pattanayek | 3/12/2009 |
| Vanadium | U | µg/L | 3.4 | 5 | M Pattanayek | 3/12/2009 |
| Zinc | 4.3J | µg/L | 1.9 | 5 | M Pattanayek | 3/12/2009 |

Lab-Sample Number: K00002210003
Project Name:
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA Ash Spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 03/11/2009 10:26
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 8.07 pH Units
Chlorine, residual:
Conductivity: 223 uMHO
Temperature: 11.01
Dissolved Oxygen: 12.48 mg/L
Other:
Flow: CFS

| TEST: Mercury | | METHOD: EPA 245.1 | | | | |
|---------------|--------|-------------------|------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | ML | ANALYZED BY: | DATE |
| Mercury | U | µg/L | 0.13 | 0.2 | A Wilson | 3/12/2009 |

J - Estimated value between MDL and ML
MDL - Method Detection Limit
ML - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002210004
Project Name:
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 03/11/2009 10:40
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 8.12 pH Units
Chlorine, residual:
Conductivity: 220 uMHO
Temperature: 10.98
Dissolved Oxygen: 12.61 mg/L
Other:
Flow: CFS

| TEST: Digestion Metals | | | METHOD: EPA 200.2 | | | |
|------------------------|------------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 03/12/2009 | | | | A Wilson | 3/12/2009 |

| TEST: ICP | | | METHOD: EPA 200.7 | | | |
|-----------|--------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Iron | 110 | µg/L | 2.9 | 10 | M Pattanayek | 3/13/2009 |

| TEST: ICP-MS | | | METHOD: EPA 200.8 | | | |
|--------------|--------|-------|-------------------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Aluminum | 130 | µg/L | 6.4 | 10 | M Pattanayek | 3/12/2009 |
| Antimony | U | µg/L | 0.33 | 1 | M Pattanayek | 3/12/2009 |
| Arsenic | U | µg/L | 0.93 | 5 | M Pattanayek | 3/12/2009 |
| Barium | 35 | µg/L | 2.5 | 5 | M Pattanayek | 3/12/2009 |
| Beryllium | U | µg/L | 0.11 | 1 | M Pattanayek | 3/12/2009 |
| Cadmium | U | µg/L | 0.41 | 1 | M Pattanayek | 3/12/2009 |
| Chromium | U | µg/L | 2.0 | 5 | M Pattanayek | 3/12/2009 |
| Cobalt | 0.19J | µg/L | 0.04 | 1 | M Pattanayek | 3/12/2009 |
| Copper | 1.5 | µg/L | 0.38 | 1 | M Pattanayek | 3/12/2009 |
| Lead | 0.24J | µg/L | 0.10 | 1 | M Pattanayek | 3/12/2009 |
| Manganese | 29 | µg/L | 0.42 | 1 | M Pattanayek | 3/12/2009 |
| Nickel | 1.3 | µg/L | 0.25 | 1 | M Pattanayek | 3/12/2009 |
| Selenium | U | µg/L | 1.3 | 5 | M Pattanayek | 3/12/2009 |
| Silver | U | µg/L | 0.03 | 0.25 | M Pattanayek | 3/12/2009 |
| Thallium | 0.11J | µg/L | 0.03 | 1 | M Pattanayek | 3/12/2009 |
| Vanadium | U | µg/L | 3.4 | 5 | M Pattanayek | 3/12/2009 |
| Zinc | 1.9J | µg/L | 1.9 | 5 | M Pattanayek | 3/12/2009 |

Lab-Sample Number: K00002210004
Project Name:
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 03/11/2009 10:40
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 8.12 pH Units
Chlorine, residual:
Conductivity: 220 uMHO
Temperature: 10.98
Dissolved Oxygen: 12.61 mg/L
Other:
Flow: CFS

| TEST: Mercury | | METHOD: EPA 245.1 | | | | | |
|---------------|--------|-------------------|------|-----|--------------|-----------|--|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE | |
| Mercury | U | µg/L | 0.13 | 0.2 | A Wilson | 3/12/2009 | |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002210005
Project Name:
Sample Description: Emory River mile 0.1- Field Duplicate
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO-FD
Date/Time Collected: 03/11/2009 10:40
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 8.12 pH Units
Chlorine, residual:
Conductivity: 221 uMHO
Temperature: 10.90
Dissolved Oxygen: 12.63 mg/L
Other:
Flow: CFS

| TEST: Digestion Metals | | | METHOD: EPA 200.2 | | | |
|------------------------|------------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 03/12/2009 | | | | A Wilson | 3/12/2009 |

| TEST: ICP | | | METHOD: EPA 200.7 | | | |
|-----------|--------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Iron | 110 | µg/L | 2.9 | 10 | M Pattanayek | 3/13/2009 |

| TEST: ICP-MS | | | METHOD: EPA 200.8 | | | |
|--------------|--------|-------|-------------------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Aluminum | 120 | µg/L | 6.4 | 10 | M Pattanayek | 3/12/2009 |
| Antimony | U | µg/L | 0.33 | 1 | M Pattanayek | 3/12/2009 |
| Arsenic | U | µg/L | 0.93 | 5 | M Pattanayek | 3/12/2009 |
| Barium | 35 | µg/L | 2.5 | 5 | M Pattanayek | 3/12/2009 |
| Beryllium | U | µg/L | 0.11 | 1 | M Pattanayek | 3/12/2009 |
| Cadmium | U | µg/L | 0.41 | 1 | M Pattanayek | 3/12/2009 |
| Chromium | U | µg/L | 2.0 | 5 | M Pattanayek | 3/12/2009 |
| Cobalt | 0.19J | µg/L | 0.04 | 1 | M Pattanayek | 3/12/2009 |
| Copper | 1.3 | µg/L | 0.38 | 1 | M Pattanayek | 3/12/2009 |
| Lead | 0.26J | µg/L | 0.10 | 1 | M Pattanayek | 3/12/2009 |
| Manganese | 34 | µg/L | 0.42 | 1 | M Pattanayek | 3/12/2009 |
| Nickel | 1.4 | µg/L | 0.25 | 1 | M Pattanayek | 3/12/2009 |
| Selenium | U | µg/L | 1.3 | 5 | M Pattanayek | 3/12/2009 |
| Silver | U | µg/L | 0.03 | 0.25 | M Pattanayek | 3/12/2009 |
| Thallium | 0.08J | µg/L | 0.03 | 1 | M Pattanayek | 3/12/2009 |
| Vanadium | 11 | µg/L | 3.4 | 5 | M Pattanayek | 3/12/2009 |
| Zinc | 4.3J | µg/L | 1.9 | 5 | M Pattanayek | 3/12/2009 |

Lab-Sample Number: K00002210005
Project Name:
Sample Description: Emory River mile 0.1- Field Duplicate
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO-FD
Date/Time Collected: 03/11/2009 10:40
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 8.12 pH Units
Chlorine, residual:
Conductivity: 221 uMHO
Temperature: 10.90
Dissolved Oxygen: 12.63 mg/L
Other:
Flow: CFS

| TEST: Mercury | | METHOD: EPA 245.1 | | | | |
|---------------|--------|-------------------|------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | ML | ANALYZED BY: | DATE |
| Mercury | U | µg/L | 0.13 | 0.2 | A Wilson | 3/12/2009 |

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: K00002210006
Project Name:
Sample Description: Emory River mile 0.1- Field Blank
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO-FB
Date/Time Collected: 03/11/2009 10:40
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

| TEST: Digestion Metals | | | METHOD: EPA 200.2 | | | |
|------------------------|------------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 03/12/2009 | | | | A Wilson | 3/12/2009 |

| TEST: ICP | | | METHOD: EPA 200.7 | | | |
|-----------|--------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Iron | U | µg/L | 2.9 | 10 | M Pattanayek | 3/13/2009 |

| TEST: ICP-MS | | | METHOD: EPA 200.8 | | | |
|--------------|--------|-------|-------------------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Aluminum | U | µg/L | 6.4 | 10 | M Pattanayek | 3/12/2009 |
| Antimony | U | µg/L | 0.33 | 1 | M Pattanayek | 3/12/2009 |
| Arsenic | U | µg/L | 0.93 | 5 | M Pattanayek | 3/12/2009 |
| Barium | U | µg/L | 2.5 | 5 | M Pattanayek | 3/12/2009 |
| Beryllium | U | µg/L | 0.11 | 1 | M Pattanayek | 3/12/2009 |
| Cadmium | U | µg/L | 0.41 | 1 | M Pattanayek | 3/12/2009 |
| Chromium | U | µg/L | 2.0 | 5 | M Pattanayek | 3/12/2009 |
| Cobalt | U | µg/L | 0.04 | 1 | M Pattanayek | 3/12/2009 |
| Copper | 0.49J | µg/L | 0.38 | 1 | M Pattanayek | 3/12/2009 |
| Lead | U | µg/L | 0.10 | 1 | M Pattanayek | 3/12/2009 |
| Manganese | U | µg/L | 0.42 | 1 | M Pattanayek | 3/12/2009 |
| Nickel | U | µg/L | 0.25 | 1 | M Pattanayek | 3/12/2009 |
| Selenium | U | µg/L | 1.3 | 5 | M Pattanayek | 3/12/2009 |
| Silver | U | µg/L | 0.03 | 0.25 | M Pattanayek | 3/12/2009 |
| Thallium | 0.04J | µg/L | 0.03 | 1 | M Pattanayek | 3/12/2009 |
| Vanadium | 9.4 | µg/L | 3.4 | 5 | M Pattanayek | 3/12/2009 |
| Zinc | 1.9J | µg/L | 1.9 | 5 | M Pattanayek | 3/12/2009 |

Lab-Sample Number: K00002210006
Project Name:
Sample Description: Emory River mile 0.1- Field Blank
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO-FB
Date/Time Collected: 03/11/2009 10:40
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

| TEST: Mercury | | METHOD: EPA 245.1 | | | | |
|---------------|--------|-------------------|------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | ML | ANALYZED BY: | DATE |
| Mercury | U | µg/L | 0.13 | 0.2 | A Wilson | 3/12/2009 |

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002210007
Project Name:
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA Ash Spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 03/11/2009 10:54
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 8.02 pH Units
Chlorine, residual:
Conductivity: 183 uMHO
Temperature: 11.32
Dissolved Oxygen: 12.51 mg/L
Other:
Flow: CFS

| TEST: Digestion Metals | | METHOD: EPA 200.2 | | | | |
|------------------------|------------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 03/12/2009 | | | | A Wilson | 3/12/2009 |

| TEST: ICP | | METHOD: EPA 200.7 | | | | |
|-----------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Iron | 110 | µg/L | 2.9 | 10 | M Pattanayek | 3/13/2009 |

| TEST: ICP-MS | | METHOD: EPA 200.8 | | | | |
|--------------|--------|-------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Aluminum | 130 | µg/L | 6.4 | 10 | M Pattanayek | 3/12/2009 |
| Antimony | U | µg/L | 0.33 | 1 | M Pattanayek | 3/12/2009 |
| Arsenic | U | µg/L | 0.93 | 5 | M Pattanayek | 3/12/2009 |
| Barium | 35 | µg/L | 2.5 | 5 | M Pattanayek | 3/12/2009 |
| Beryllium | U | µg/L | 0.11 | 1 | M Pattanayek | 3/12/2009 |
| Cadmium | U | µg/L | 0.41 | 1 | M Pattanayek | 3/12/2009 |
| Chromium | U | µg/L | 2.0 | 5 | M Pattanayek | 3/12/2009 |
| Cobalt | 0.19J | µg/L | 0.04 | 1 | M Pattanayek | 3/12/2009 |
| Copper | 1.8 | µg/L | 0.38 | 1 | M Pattanayek | 3/12/2009 |
| Lead | 0.23J | µg/L | 0.10 | 1 | M Pattanayek | 3/12/2009 |
| Manganese | 30 | µg/L | 0.42 | 1 | M Pattanayek | 3/12/2009 |
| Nickel | 1.3 | µg/L | 0.25 | 1 | M Pattanayek | 3/12/2009 |
| Selenium | U | µg/L | 1.3 | 5 | M Pattanayek | 3/12/2009 |
| Silver | U | µg/L | 0.03 | 0.25 | M Pattanayek | 3/12/2009 |
| Thallium | 0.05J | µg/L | 0.03 | 1 | M Pattanayek | 3/12/2009 |
| Vanadium | 8.8 | µg/L | 3.4 | 5 | M Pattanayek | 3/12/2009 |
| Zinc | 2.7J | µg/L | 1.9 | 5 | M Pattanayek | 3/12/2009 |

Lab-Sample Number: K00002210007
Project Name:
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA Ash Spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 03/11/2009 10:54
Sampler's Name: Justin Fisher
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 03/11/2009 15:25
Received By: E McCrary

Field Determinations
pH: 8.02 pH Units
Chlorine, residual:
Conductivity: 183 uMHO
Temperature: 11.32
Dissolved Oxygen: 12.51 mg/L
Other:
Flow: CFS

| TEST: Mercury | | METHOD: EPA 245.1 | | | | | |
|---------------|--------|-------------------|------|-----|--------------|-----------|--|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE | |
| Mercury | U | µg/L | 0.13 | 0.2 | A Wilson | 3/12/2009 | |

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

| | | | |
|------------------------------|-------------------------------------------------|-----------------------------|--------------------|
| Lab-Sample Number: | K00002210008 | Field Determinations | |
| Project Name: | | pH: | 8.11 pH Units |
| Sample Description: | Clinch River mile 4.5 near Sugar Grove Valley R | Chlorine, residual: | |
| Sampler Project Name: | TVA Ash Spill | Conductivity: | 228 uMHO |
| Project Site No.: | 6 | Temperature: | 10.09 |
| Station No.: | CLINC004.5RO | Dissolved Oxygen: | 12.76 mg/L |
| Date/Time Collected: | 03/11/2009 11:05 | Other: | |
| Sampler's Name: | Justin Fisher | Flow: | CFS |
| County: | ROANE - 73 | | |
| Sample Matrix: | Water | | |
| EFO: | Knoxville | | |
| Sampling Agency: | TDEC-WPC | | |
| Billing Code: | 327.34-20 | | |
| Send Report To: | TDEC-WPC | | |
| Agency Invoiced: | TDEC-WPC | | |
| Priority Date: | | | |
| Date/Time Received: | 03/11/2009 15:25 | | |
| Received By: | E McCrary | | |

| TEST: Digestion Metals | | METHOD: EPA 200.2 | | | | |
|------------------------|------------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 03/12/2009 | | | | A Wilson | 3/12/2009 |

| TEST: ICP | | METHOD: EPA 200.7 | | | | |
|-----------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Iron | 110 | µg/L | 2.9 | 10 | M Pattanayek | 3/13/2009 |

| TEST: ICP-MS | | METHOD: EPA 200.8 | | | | |
|--------------|--------|-------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Aluminum | 110 | µg/L | 6.4 | 10 | M Pattanayek | 3/12/2009 |
| Antimony | U | µg/L | 0.33 | 1 | M Pattanayek | 3/12/2009 |
| Arsenic | U | µg/L | 0.93 | 5 | M Pattanayek | 3/12/2009 |
| Barium | 34 | µg/L | 2.5 | 5 | M Pattanayek | 3/12/2009 |
| Beryllium | U | µg/L | 0.11 | 1 | M Pattanayek | 3/12/2009 |
| Cadmium | U | µg/L | 0.41 | 1 | M Pattanayek | 3/12/2009 |
| Chromium | U | µg/L | 2.0 | 5 | M Pattanayek | 3/12/2009 |
| Cobalt | 0.18J | µg/L | 0.04 | 1 | M Pattanayek | 3/12/2009 |
| Copper | 1.8 | µg/L | 0.38 | 1 | M Pattanayek | 3/12/2009 |
| Lead | 0.24J | µg/L | 0.10 | 1 | M Pattanayek | 3/12/2009 |
| Manganese | 32 | µg/L | 0.42 | 1 | M Pattanayek | 3/12/2009 |
| Nickel | 1.4 | µg/L | 0.25 | 1 | M Pattanayek | 3/12/2009 |
| Selenium | U | µg/L | 1.3 | 5 | M Pattanayek | 3/12/2009 |
| Silver | U | µg/L | 0.03 | 0.25 | M Pattanayek | 3/12/2009 |
| Thallium | 0.05J | µg/L | 0.03 | 1 | M Pattanayek | 3/12/2009 |
| Vanadium | 4.9J | µg/L | 3.4 | 5 | M Pattanayek | 3/12/2009 |
| Zinc | 3.4J | µg/L | 1.9 | 5 | M Pattanayek | 3/12/2009 |

| | | | |
|------------------------------|-------------------------------------------------|-----------------------------|--------------------|
| Lab-Sample Number: | K00002210008 | Field Determinations | |
| Project Name: | | pH: | 8.11 pH Units |
| Sample Description: | Clinch River mile 4.5 near Sugar Grove Valley F | Chlorine, residual: | |
| Sampler Project Name: | TVA Ash Spill | Conductivity: | 228 uMHO |
| Project Site No.: | 6 | Temperature: | 10.09 |
| Station No.: | CLINC004.5RO | Dissolved Oxygen: | 12.76 mg/L |
| Date/Time Collected: | 03/11/2009 11:05 | Other: | |
| Sampler's Name: | Justin Fisher | Flow: | CFS |
| County: | ROANE - 73 | | |
| Sample Matrix: | Water | | |
| EFO: | Knoxville | | |
| Sampling Agency: | TDEC-WPC | | |
| Billing Code: | 327.34-20 | | |
| Send Report To: | TDEC-WPC | | |
| Agency Invoiced: | TDEC-WPC | | |
| Priority Date: | | | |
| Date/Time Received: | 03/11/2009 15:25 | | |
| Received By: | E McCrary | | |

| TEST: Mercury | | METHOD: EPA 245.1 | | | | |
|---------------|--------|-------------------|------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | ML | ANALYZED BY: | DATE |
| Mercury | U | µg/L | 0.13 | 0.2 | A Wilson | 3/12/2009 |

J - Estimated value between MDL and ML
 MDL - Method Detection Limit
 ML - Method Quantitation Limit
 U - Undetected